CLAIMS

What is claimed is:

1. A wellbore apparatus comprising:

a) a first flow joint in a wellbore, the first flow joint comprising at least one three-dimensional surface defining a first fluid flow path through the wellbore, at least one section of the first flow joint surface being permeable and at least one section of the first flow joint surface being impermeable;

b) a second flow joint in a wellbore, the second flow joint comprising at least one three-dimensional surface defining a second fluid flow path through the wellbore, at least one section of the second flow joint surface being permeable and at least one section of the second flow joint surface being impermeable;

c) wherein at least one permeable section of the first flow joint is connected to at least one permeable section of the second flow joint thereby providing at least one fluid flow path between the first flow joint and the second flow joint.

2. The apparatus of claim 1 wherein the first and second flow joints are selectively perforated basepipes.

3. The apparatus of claim 1 wherein the first flow joint is adjacent to the second flow joint in the wellbore.

4. The apparatus of claim 1 wherein the first flow joint is concentric to the second flow joint in the wellbore.

5. The apparatus of claim 1 wherein at least one flow joint comprises joints of pipe.

6. The apparatus of claim 1 wherein the first flow joint is eccentric to the second flow joint in the wellbore.

7. The apparatus of claim 5 wherein the joints of pipe are connected using flexible joints.

8. The apparatus of claim 1 wherein the three-dimensional surface of the first and second flow joints are cylindrical.

9. The apparatus of claim 1 wherein at least one wellbore annuli is utilized as a flow joint.

10. The apparatus of claim 1 wherein at least one flow joint is a sand screen.

11. The apparatus of claim 10 wherein the sand screen is a wire-wrapped screen and the wires of the screen are wrapped at varying pitches thereby creating varying levels of permeable sections and impermeable sections.

12. The apparatus of claim 1 further comprising at least one shunt tube in at least one flow joint.

13. The apparatus of claim 1 wherein the apparatus is used for producing hydrocarbons.

14. The apparatus of claim 1 wherein the apparatus is used for gravel packing a well.

15. The apparatus of claim 1 wherein at least one impermeable and at least one permeable section are each at least 7.5 centimeters long.

16. The apparatus of claim 1 wherein at least one impermeable and at least one permeable section are each at least 15 centimeters long.

17. The apparatus of claim 1 wherein at least one impermeable section of at least one flow joint is adjacent to at least one permeable section of an adjacent flow joint.

18. The apparatus of claim 1 wherein at any cross-section location of the apparatus, at least one wall of at least one flow joint is impermeable.

19. The apparatus of claim 1 wherein at any cross-section location at least one wall of at least one flow joint is impermeable and at least one wall of at least one flow joint is permeable.

20. A wellbore apparatus comprising;

a) a first selectively perforated basepipe inside the wellbore defining a first fluid flow path through the wellbore, with at least one section of the first selectively perforated basepipe being impermeable and at least one section of the first perforated basepipe being permeable;

b) a second selectively perforated basepipe inside the wellbore defining a second fluid flow path through the wellbore, with at least one section of the second selectively perforated basepipe being impermeable and at least one section of the second perforated basepipe being permeable;

c) wherein at least one permeable section of the first and at least one permeable section of the second basepipes are connected to provide at least one flow path between the first and second selectively perforated basepipe.

21. The apparatus of claim 20 wherein the basepipes are concentric.

22. The apparatus of claim 20 wherein the basepipes are eccentric.

23. The apparatus of claim 20 wherein the basepipes are adjacent.

24. The apparatus of claim 20 wherein at least one concentric basepipe is larger than at least one concentric basepipe and further comprising at least one additional wall inside the larger basepipe to provide at least one additional flow path inside the outer basepipe.

25. The apparatus of claim 20 wherein at least one eccentric basepipe is larger than at least one eccentric basepipe and further comprising at least one additional wall inside the larger basepipe to provide at least one additional flow path inside the outer basepipe.

26. The apparatus of claim 20 wherein the perforations are chosen based on the relative amount of fluids that will flow through the permeable section.

27. The apparatus of claim 20 wherein the wellbore annulus is utilized as an additional flow joint.

28. The apparatus of claim 20 further comprising at least one shunt tube in at least one flow joint.

29. The apparatus of claim 20 wherein at least three flow paths are available through the wellbore.

30. The apparatus of claim 23 wherein the adjacent joints of pipe are connected with flexible tubes.

31. The apparatus of claim 20 wherein at least one impermeable and at least one permeable section are each at least 7.5 centimeters long.

32. The apparatus of claim 20 wherein at least one impermeable and at least one permeable section are each at least 15 centimeters long.

33. The apparatus of claim 20 wherein at least one impermeable section of at least one flow joint is adjacent to at least one permeable section of an adjacent flow joint.

34. The apparatus of claim 20 wherein at any cross-section location of the apparatus, at least one wall of at least one flow joint is impermeable.

35. The apparatus of claim 20 wherein at any cross-section location at least one wall of at least one flow joint is impermeable and at least one wall of at least one flow joint is permeable.

36. A method for completing a wellbore comprising:

a) providing a wellbore apparatus for producing hydrocarbons comprising a first flow joint in a wellbore, the first flow joint comprising at least one three-dimensional surface defining a first fluid flow path through the wellbore with at least

one section of the first flow joint surface being permeable and at least one section of the first flow joint surface being impermeable, a second flow joint in a wellbore, the second flow joint comprising at least one three-dimensional surface defining a second fluid flow path through the wellbore with at least one section of the first second flow joint surface being permeable and at least one section of the first second flow joint surface being impermeable, wherein at least one permeable section of the first flow joint is connected to at least one permeable section of the second flow joint thereby providing at least one fluid flow path between the first flow joint and the second flow joint;

b) installing the wellbore apparatus in the wellbore .

37. The method of claim 36 wherein installing the wellbore apparatus provides at least two separate flow paths in the wellbore with at least one connection permitting fluid flow between the flowpaths.

38. The apparatus of claim 36 wherein the apparatus is used for producing hydrocarbons.

39. The apparatus of claim 36 wherein the apparatus is used for gravel packing a well.

40. The method of claim 36 further comprising producing hydrocarbons from the wellbore.

41. Hydrocarbons that are produced according to claim 40.

42. The method of claim 36 further comprising at least one shunt tube in at least one flow joint, and gravel packing the wellbore using the shunt tube in the flow joint.

43. The method of claim 36 further comprising installing a complete gravel pack during gravel packing operations after the sand screen has been mechanically damaged.

44. A method of flowing fluids in a wellbore comprising;

a) providing a wellbore with an apparatus comprising a first flow joint in a wellbore, the first flow joint comprising at least one three-dimensional surface defining a first fluid flow path through the wellbore with at least one section of the first flow joint surface being permeable and at least one section of the first flow joint surface being impermeable, a second flow joint in a wellbore, the second flow joint comprising at least one three-dimensional surface defining a second fluid flow path through the wellbore with at least one section of the second flow joint surface being permeable and at least one section of the second flow joint surface being impermeable, wherein at least one permeable section of the first flow joint is connected to at least one permeable section of the second flow joint thereby providing at least one fluid flow path between the first flow joint and the second flow joint.

45. The method of claim 44 further comprising producing hydrocarbons through the flow joint.

46. The method of claim 44 further comprising injecting fluids into the well through the flow joints.

47. A method of manufacturing a wire-wrapped screen, the improvement comprising;

wrapping the wire at varying pitches wherein at least one section of the wire wrapped screen is permeable and at least one section of the wire-wrapped screen is impermeable.